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(FILE 'HOME' ENTERED AT 18:02:24 ON 22 MAR 2006)

	FILE	'CAPLUS	S, MEDLINE' E	NTER	RED AT 18:02:34 ON 22 MAR 2006
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L2					POLYOXYETHYLENE SORBITAN ?OLEATE (P) CYCLODEX
L3					POLYOXYETHYLENE SORBITAN ?OLEATE
L4		0 9	EPOTHILONE?	(P)	POLYOXYETHYLENE SORBITAN (P) CYCLODEXTRIN?
L5		7 9	EPOTHILONE?	(P)	CYCLODEXTRIN?

ANSWER 6 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:549398 CAPLUS

DOCUMENT NUMBER: 131:169392

Fermentative preparation process for cytostatics and TITLE:

crystal forms thereof

Hofmann, Hans; Mahnke, Marion; Memmert, Klaus; INVENTOR(S):

Petersen, Frank; Schupp, Thomas; Kusters, Ernst; Mutz,

Michael

Novartis A.-G., Switz.; Novartis-Erfindungen PATENT ASSIGNEE(S):

Verwaltungsgesellschaft m.b.H.

SOURCE: PCT Int. Appl., 50 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

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	9908				A						999-1 999-1				1	9990: 9990:	
	10549				A2 B1		2000: 2004:		EP		333-	9110	/ 6		1	<i>333</i> 0.	21/
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	к.			FI,		DIC,	, بات	ric,	GD, G	Ι,	Δ1,	шт,	шо,	NΔ,	J.,	nc,	,
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	52562				A		2004				999-					9990:	
	2827				E T		2004				999-! 999-!					9990: 9990:	
	10549				T3		2005) 2005)				999-: 999-:					9990:	
	22683				C2		2005				000-:					9990:	
	20000		14		A		2000:				000-4					0000	
	63802				B1		2002				000-6		54			0000	
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	6656				B2	:	2003	1202									
US	2003	1947	87		A 1	;	2003	1016	US	2	003-3	3383	36		2	0030	108
US	20032	2203	79		A 1	:	2003	1127	US	2	003-4	45976	52		2	0030	612
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	20050				A2		2005				004-2		97			0040	
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PRIORITY APPLN.	INFO.:	CH	1998-396	Α	19980219
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		ΕP	1999-911678	А3	19990217
		JP	2000-532542	А3	19990217
	•	WO	1999-EP1025	W	19990217
		US	2000-656954	A1	20000907
		US	2002-59587	А3	20020129
		US	2003-338336	B1	20030108

The invention relates to a process for concentrating epothilones in culture media, a process for the production of epothilones, a process for separating epothilones A and B and a strain obtained by mutagenesis for the production of epothilones, as well as aspects related thereto. Crystal forms of epothilone B are also described.

ANSWER 6 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:549398 CAPLUS

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Hofmann, Hans; Mahnke, Marion; Memmert, Klaus; INVENTOR (S):

Petersen, Frank; Schupp, Thomas; Kusters, Ernst; Mutz,

Michael

Novartis A.-G., Switz.; Novartis-Erfindungen PATENT ASSIGNEE(S):

Verwaltungsgesellschaft m.b.H.

PCT Int. Appl., 50 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT NO.		APPLICATION NO.	DATE
WO 9942602	A2 19990826		19990217
WO 9942602 WO 9942602	A2 19990828 A3 19991125		10000217
		BG, BR, BY, CA, CH, CN,	CU. CZ. DE.
DK. EE. ES.	FI. GB. GD. GE.	GH, GM, HR, HU, ID, IL,	IN. IS. JP.
		LR, LS, LT, LU, LV, MD,	
		RU, SD, SE, SG, SI, SK,	
	UG, UZ, VN, YU,		
		UG, ZW, AT, BE, CH, CY,	DE, DK, ES,
		MC, NL, PT, SE, BF, BJ,	
	GW, ML, MR, NE,	• • • • • • • • • • • • • • • • • • • •	
ÚS 6194181	B1 20010227	US 1999-248910	19990212
CA 2318818	AA 19990826	CA 1999-2318818	19990217
AU 9930287	A1 19990906	AU 1999-30287	19990217
AU 746294	B2 20020418		
BR 9908119	A 20001024	BR 1999-8119	19990217
EP 1054994	A2 20001129	EP 1999-911678	19990217
EP 1054994	B1 20041117		
R: AT, BE, CH,	DE, DK, ES, FR,	GB, GR, IT, LI, LU, NL,	SE, MC, PT,
IE, SI, FI,	RO		
TR 200002431	T2 20010122	TR 2000-200002431	19990217
JP 2002504346	T2 20020212	JP 2000-532542	19990217
JP 3681109	B2 20050810		
TR 200101634	T2 20020621 A 20030725	TR 2001-200101634	19990217
NZ 506138	A 20030725	NZ 1999-506138	19990217
EP 1428826	A2 20040616	EP 2004-2632	19990217
EP 1428826	A3 20041027		
R: AT, BE, CH,	DE, DK, ES, FR,	GB, GR, IT, LI, LU, NL,	SE, MC, PT,
IE, FI, CY			
CN 1535971	A 20041013	CN 2004-10034240	19990217
NZ 525622	A 20041029		19990217
AT 282710	E 20041215	AT 1999-911678	19990217
PT 1054994	T 20050429		19990217
ES 2233028	T3 20050601		19990217
RU 2268306	C2 20060120	RU 2000-124168	19990217
NO 2000004114	A 20001017		20000817
US 6380227	B1 20020430	US 2000-656954	20000907
HK 1034100	A1 20050715	HK 2001-102978	20010425
US 2002165256	A1 20021107	US 2002-59587	20020129
US 6656711	B2 20031202	110 2002 228226	20030108
US 2003194787	A1 20031016	US 2003-338336 US 2003-459762	20030108
US 2003220379	A1 20031127	US 2003-459762 US 2004-754661	20030812
US 2004142990 JP 2005068156	A1 20040722 A2 20050317	JP 2004-754661	20040108
NO 2005002034	A 20001017	NO 2005-2034	20050426
PRIORITY APPLN. INFO.:	A 20001017		A 19980219
INIONIII AIIUN. INIO.:		CII 1550 550	

CH	1998-1007	Α	19980505
US	1999-248910	A3	19990212
ΕP	1999-911678	A3	19990217
JΡ	2000-532542	A3	19990217
WO	1999-EP1025	W	19990217
US	2000-656954	A1	20000907
US	2002-59587	A3	20020129
US	2003-338336	B1	20030108

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ANSWER 5 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN

1999:811346 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 132:60132

Genes for the biosynthesis of epothilones by Sorangium TITLE:

cellulosum

Schupp, Thomas; Ligon, James Madison; Molnar, Istvan; INVENTOR(S):

Zirkle, Ross; Gorlach, Jorn; Cyr, Devon

Novartis AG, Switz.; Novartis-Erfindungen PATENT ASSIGNEE(S):

Verwaltungsgesellschaft mbH

PCT Int. Appl., 174 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

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	US	6121	029			Α		2000	0919		US :	1999-	3354	09		1	9990	517
	US	6346	404			B1		2002	0212		US 2	2000-	5681	02		2	0000	510
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	NO	2000	0061	95		Α		2001	0216		NO 2	2000-	6195			2	00012	206
	US	2002	1927	78		A1		2002	1219		US 2	2001-	1471	7		2	0011	113
	US	6858	404			B2		2005	0222									
	JP	2006	0611	66		A2		2006	0309		JP :	2005-	3059	98		2	0051	020
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											US :	1998-	9950	4	1	A 1	9980	518
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	pol	ypep	tides	s ne	cess	ary i	For	the :	bios	ynth	esis	s of	epot:	hilo	ne in	n So	rang	ium

cellulosum strain 90 (DSM 6773). The gene cluster includes 22 open reading frames, several of which include domains for a given distinct activity of the epothilone synthase, including acyl carrier protein, β -ketosynthase, acyltransferase, β -ketoreductase, dehydratase, enoyl reductase, and thioesterase. Disclosed are methods for the production of epothilone in recombinant hosts transformed with the genes of the invention. In this manner, epothilone can be produced in quantities large enough to enable their purification and use in pharmaceutical formulations such as those for the treatment of cancer.

ANSWER 1 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN L5 ACCESSION NUMBER: 2005:592097 CAPLUS 143:103272 DOCUMENT NUMBER: TITLE: Therapeutic formulations containing epothilone derivatives Sherrill, Michael; Johnson, Robert G. INVENTOR (S): USA PATENT ASSIGNEE(S): U.S. Pat. Appl. Publ., 12 pp., Cont.-in-part of U.S. SOURCE: Ser. No.683,952. CODEN: USXXCO DOCUMENT TYPE: Patent English LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: APPLICATION NO. DATE KIND DATE PATENT NO. ---------_____ A1 US 2004-962308 US 2005148543 20050707 20041008 A2 20040422 WO 2003-US32055 20031009 WO 2004032866 A3 20040729 WO 2004032866 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG US 2003-683952 20031009 A1 20040708 US 2004132692 US 2003-683952 A2 20031009 PRIORITY APPLN. INFO.: A2 20031009 WO 2003-US32055 US 2002-417536P P 20021009 US 2002-426585P P 20021114 Formulations comprising one or more epothilones together with a AB pharmaceutically acceptable carrier are described. E.g., an epothilone D-hydroxypropyl β- cyclodextrin lyophylizate was prepared for reconstitution for injections. ANSWER 2 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 2005:346870 CAPLUS DOCUMENT NUMBER: 142:397752 Therapeutic formulations containing epothilones TITLE: Sherrill, Michael; Johnson, Robert G., Jr. INVENTOR(S): Kosan Biosciences, Inc., USA PATENT ASSIGNEE(S): PCT Int. Appl., 32 pp. SOURCE: CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE ------------------------WO 2004-US33339 20041008 WO 2005034964 A1 20050421 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
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                                            US 2003-683952
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PRIORITY APPLN. INFO .:
                                            US 2003-683952
                                            WO 2003-US32055
                                                                A 20031009
                                            US 2002-417536P
                                                                Ρ
                                                                   20021009
                                                                Ρ
                                            US 2002-426585P
                                                                   20021114
     Formulations comprise 1 or more epothilones together with a
AB
    pharmaceutically acceptable carrier. Thus, a combination of 10 mg
     epothilone D and 0.4 g hydroxypropyl-3-cyclodextrin were
     dissolved in 60% tert-butanol-water to make 1 mL of solution A second solution
    having 10 mg epothilone D and 10 mg mannitol dissolved in 60%
     tert-butanol-water was prepared A third solution of 10 mg epothilone
     D and 10 mg mannitol in 60% tert-butanol-water was also prepared Each of
     the 3 solns. was freeze-dried to form an excellent cake. The cake containing
     hydroxypropyl-\beta- cyclodextrin appeared harder and less
     smooth than the other 2 cakes.
                               THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS
REFERENCE COUNT:
                         3
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
     ANSWER 3 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN
                         2004:1066047 CAPLUS
ACCESSION NUMBER:
                         142:62404
DOCUMENT NUMBER:
                         Kinetics and mechanism of degradation of epothilone-D:
TITLE:
                         An experimental anticancer agent
                         Jumaa, M.; Carlson, B.; Chimilio, L.; Silchenko, S.;
AUTHOR (S):
                         Stella, V. J.
                         Department of Pharmaceutical Chemistry, University of
CORPORATE SOURCE:
                         Kansas, Lawrence, KS, 66047, USA
                         Journal of Pharmaceutical Sciences (2004), 93(12),
SOURCE:
                         2953-2961
                         CODEN: JPMSAE; ISSN: 0022-3549
PUBLISHER:
                         Wiley-Liss, Inc.
DOCUMENT TYPE:
                         Journal
LANGUAGE:
                         English
     The objective of this study was to investigate the stability and the
     degradation pathway of epothilone-D (Epo-D), an exptl. anticancer
     agent. In pH range 4-9, Epo-D displayed pH-independent stability and the
     highest stability was observed at pH 1.5-2 where its thiazole group is
     protonated. Increasing the pH >9 or <1.5 resulted in an increase in the
     degradation rate. Epo-D contains an ester group that can be hydrolyzed.
                                                                               The
     formation of the hydrolytic product was confirmed by the NMR, fast atom
     bombardment mass spectroscopy, and liquid chromatog./mass spectroscopy/mass
     spectroscopy techniques. The largely sigmoidal pH-rate profile is not
     consistent with the normal pH dependency of ester hydrolysis involving an
     addition/elimination mechanism. Hence, a hydrolysis mechanism through a
     carbonium ion was suggested. At pH 4 and 7.4, no buffer catalysis was
     observed (0.01, 0.02, and 0.05 M buffers) and no significant deuterium
     kinetic solvent isotope effect was noted. The degradation was very sensitive
     to changes in the dielec. constant of the solvents as significant
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enhancement in the stability was observed in buffer-acetonitrile and 0.1 M (SBE)7m- β - cyclodextrin solns. compared with just buffer, suggesting that the rate-determining step in the degradation pathway involved formation of a polar transition state. Mass spectral anal. of the reaction run in 180 water was consistent with incorporation of the 180 in the alc. hydroxyl rather than the carboxylate group. These observations strongly support the carbonium ion mechanism for the hydrolysis of Epo-D in the pH range 4-9. A pKa value of 2.86 for Epo-D was estimated from the fit of the pH-rate profile. This number was confirmed independently by the changes in UV absorbance of Epo-D as a function of pH (pKa 3.1) determined at 25°C and the same ionic strength.

REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:331933 CAPLUS

DOCUMENT NUMBER: 140:344910

TITLE: Therapeutic formulations containing epothilones for

treatment of hyperproliferative diseases

INVENTOR(S): Sherrill, Michael; Johnson, Robert G.

PATENT ASSIGNEE(S): Kosan Biosciences, Inc., USA

SOURCE: PCT Int. Appl., 22 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

AB

	PATENT NO.					KIND DATE				APPL	ICAT:	ION 1	NO.	DATE				
		2004				A2		2004		,	WO 2	003-1	US32	055		2	0031	009
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pharmaceutically acceptable carrier, in particular such pharmaceutical compns. suitable for oral administration of an epothilone are described. For example, a combination of 10 mg of epothilone D and 0.4 g of hydroxypropyl-β- cyclodextrin were dissolved in 60% tert-butanol-water to make 1 mL of solution The solution was freeze-dried and formed an excellent lyophilate cake. The cake appeared harder and less smooth than the one containing mannitol. The epothilone D formulation had good oral bioavailability, suggesting that oral administration to cancer patients or patients suffering from other hyperproliferative conditions or diseases is feasible.

ANSWER 5 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN

1999:811346 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 132:60132

Genes for the biosynthesis of epothilones by Sorangium TITLE:

cellulosum

Schupp, Thomas; Ligon, James Madison; Molnar, Istvan; INVENTOR(S):

Zirkle, Ross; Gorlach, Jorn; Cyr, Devon

Novartis AG, Switz.; Novartis-Erfindungen PATENT ASSIGNEE(S):

Verwaltungsgesellschaft mbH

SOURCE: PCT Int. Appl., 174 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	PATENT NO.								APPLICATION NO.						DATE		
											1999-1						
WO	9966	028			A 3		2000	0629			•						
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		DE,	DK,	EE,	ES,	FI,	GB,	GD,	GE,	GH	, GM,	HR,	HU,	ID,	IL,	IN,	IS,
		JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR	, LS,	LT,	LU,	LV,	MD,	MG,	MK,
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	6858				В2		2005	0222	_						-		
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US	1998-99504	Α	19980618
US	1998-101631P	P	19980924
US	1999-118906P	P	19990205
JΡ	2000-554837	A3	19990616
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WO	1999-EP4171	W	19990616
US	1999-335409	A3	19990617
US	2000-568472	A1	20000510

Nucleic acid mols. are isolated from Sorangium cellulosum that encode AB polypeptides necessary for the biosynthesis of epothilone in Sorangium cellulosum strain 90 (DSM 6773). The gene cluster includes 22 open reading frames, several of which include domains for a given distinct activity of the epothilone synthase, including acyl carrier protein, β -ketosynthase, acyltransferase, β -ketoreductase, dehydratase, enoyl reductase, and thioesterase. Disclosed are methods for the production of epothilone in recombinant hosts transformed with the genes of the invention. In this manner, epothilone can be produced in quantities large enough to enable their purification and use in pharmaceutical formulations such as those for the treatment of cancer.

ANSWER 6 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:549398 CAPLUS

DOCUMENT NUMBER: 131:169392

Fermentative preparation process for cytostatics and TITLE:

crystal forms thereof

Hofmann, Hans; Mahnke, Marion; Memmert, Klaus; INVENTOR (S):

Petersen, Frank; Schupp, Thomas; Kusters, Ernst; Mutz,

Michael

Novartis A.-G., Switz.; Novartis-Erfindungen PATENT ASSIGNEE(S):

Verwaltungsgesellschaft m.b.H.

PCT Int. Appl., 50 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PA:	rent :				KIND DATE A2 19990826												
WO	9942									wo :	1999-	EP10:	25		1:	9990	217
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PRIORITY APPLN. INFO.:
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                                            US 2003-338336
                                                                B1 20030108
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AB The invention relates to a process for concentrating epothilones in culture media, a process for the production of epothilones, a process for separating epothilones A and B and a strain obtained by mutagenesis for the production of epothilones, as well as aspects related thereto. Crystal forms of epothilone B are also described.

L5 ANSWER 7 OF 7 MEDLINE on STN ACCESSION NUMBER: 2004551316 MEDLINE DOCUMENT NUMBER: PubMed ID: 15459947

TITLE: Kinetics and mechanism of degradation of epothilone-D: an

experimental anticancer agent.

AUTHOR: Jumaa M; Carlson B; Chimilio L; Silchenko S; Stella V J CORPORATE SOURCE: Department of Pharmaceutical Chemistry, University of

Kansas, 2095 Constant Avenue, Lawrence, Kansas 66047, USA.

CONTRACT NUMBER: N01-CM-77017 (NCI) N01-CM27004 (NCI)

SOURCE: Journal of pharmaceutical sciences, (2004 Dec) Vol. 93, No.

12, pp. 2953-61.

Journal code: 2985195R. ISSN: 0022-3549.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200504

ENTRY DATE: Entered STN: 20041104

Last Updated on STN: 20050413 Entered Medline: 20050412

AB The objective of this study was to investigate the stability and the degradation pathway of epothilone-D (Epo-D), an experimental anticancer agent. In pH range 4-9, Epo-D displayed pH-independent stability and the highest stability was observed at pH 1.5-2 where its thiazole group is protonated. Increasing the pH >9 or <1.5 resulted in an increase in the degradation rate. Epo-D contains an ester group that can be hydrolyzed. The formation of the hydrolytic product was confirmed by the nuclear magnetic resonance (NMR), fast atom bombardment mass spectroscopy and liquid chromatography/mass spectroscopy/mass spectroscopy

techniques. The largely sigmoidal pH-rate profile is not consistent with the normal pH dependency of ester hydrolysis involving an addition/elimination mechanism. Hence, a hydrolysis mechanism through a carbonium ion was suggested. At pH 4 and 7.4, no buffer catalysis was observed (0.01, 0.02, and 0.05 M buffers) and no significant deuterium kinetic solvent isotope effect was noted. The degradation was very sensitive to changes in the dielectric constant of the solvents as significant enhancement in the stability was observed in buffer-acetonitrile and 0.1 M (SBE) 7m-beta-cyclodextrin solutions compared with just buffer, suggesting that the rate-determining step in the degradation pathway involved formation of a polar transition state. Mass spectral analysis of the reaction run in 180 water was consistent with incorporation of the 180 in the alcohol hydroxyl rather than the carboxylate group. These observations strongly support the carbonium ion mechanism for the hydrolysis of Epo-D in the pH range 4-9. A pKa value of 2.86 for Epo-D was estimated from the fit of the pH-rate profile. This number was confirmed independently by the changes in ultraviolet absorbance of Epo-D as a function of pH (pKa 3.1) determined at 25 degrees C and the same ionic strength.

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ANSWER 6 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN

1999:549398 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 131:169392

Fermentative preparation process for cytostatics and TITLE:

crystal forms thereof

Hofmann, Hans; Mahnke, Marion; Memmert, Klaus; INVENTOR(S):

Petersen, Frank; Schupp, Thomas; Kusters, Ernst; Mutz,

Novartis A.-G., Switz.; Novartis-Erfindungen PATENT ASSIGNEE(S):

Verwaltungsgesellschaft m.b.H.

PCT Int. Appl., 50 pp. SOURCE:

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English

FAMILY ACC. NUM. COUNT:

		APPLICATION NO.	DATE
WO 9942602 WO 9942602	A2 19990826 A3 19991125	WO 1999-EP1025	19990217
		BG, BR, BY, CA, CH, CN,	CU, CZ, DE,
		GH, GM, HR, HU, ID, IL,	
		LR, LS, LT, LU, LV, MD,	
		RU, SD, SE, SG, SI, SK,	
	, UG, UZ, VN, YU,		
		UG, ZW, AT, BE, CH, CY,	DE. DK. ES.
FI. FR. GB.	. GR. IE. IT. LU.	MC, NL, PT, SE, BF, BJ,	CF, CG, CI,
	, GW, ML, MR, NE,		
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CA 2318818	AA 19990826	CA 1999-2318818	19990217
AU 9930287	A1 19990906		19990217
AU 746294	B2 20020418	A0 1999 30207	10000217
BR 9908119	7 20020410		19990217
AU 9930287 AU 746294 BR 9908119 EP 1054994	A 20001024	BR 1999-8119 EP 1999-911678	19990217
EP 1054994	B1 20041117		1333001,
		GB, GR, IT, LI, LU, NL,	SE MC PT
IE, SI, FI,		GB, GR, 11, L1, L0, ND,	DE, MC, II,
TR 200002431	T2 20010122	TR 2000-200002431	19990217
	T2 20010122		19990217
JP 2002504346	B2 20050810		17770217
	m2 20030610		19990217
TR 200101634	T2 20020621		19990217
NZ 506138	A 20030725	NZ 1999-500130	19990217
EP 1428826	A2 20040616		19990217
EP 1428826	A3 20041027		CE MC DE
	, DE, DK, ES, FR,	GB, GR, IT, LI, LU, NL,	SE, MC, PI,
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PT 1054994	T 20050429		19990217
ES 2233028	T3 20050601		19990217
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NO 2000004114	A 20001017		20000817
US 6380227	B1 20020430		20000907
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JP 2005068156	A2 20050317		20040930
NO 2005002034	A 20001017	NO 2005-2034	20050426

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AB The invention relates to a process for concentrating epothilones in culture media, a process for the production of epothilones, a process for separating epothilones A and B and a strain obtained by mutagenesis for the production of epothilones, as well as aspects related thereto. Crystal forms of epothilone B are also described.

ANSWER 5 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN

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DOCUMENT NUMBER: 132:60132

Genes for the biosynthesis of epothilones by Sorangium TITLE:

Schupp, Thomas; Ligon, James Madison; Molnar, Istvan; INVENTOR(S):

Zirkle, Ross; Gorlach, Jorn; Cyr, Devon

Novartis AG, Switz.; Novartis-Erfindungen PATENT ASSIGNEE(S):

Verwaltungsgesellschaft mbH

PCT Int. Appl., 174 pp. SOURCE:

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DOCUMENT TYPE:

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LANGUAGE:

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English

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PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.					
WO 9966028	A2 19991223		19990616				
WO 9966028	A3 20000629						
		BB, BG, BR, BY, CA, CH	H, CN, CU, CZ,				
		GE, GH, GM, HR, HU, II					
		LK, LR, LS, LT, LU, LV					
		RO, RU, SD, SE, SG, SI					
TM, TR, TT,	UA, UG, US, UZ,	VN, YU, ZA, ZW					
RW: GH, GM, KE,	LS, MW, SD, SL,	SZ, UG, ZW, AT, BE, CH	H, CY, DE, DK,				
ES, FI, FR,	GB, GR, IE, IT,	LU, MC, NL, PT, SE, BI	F, BJ, CF, CG,				
	GN, GW, ML, MR,						
NZ 508326	A 20031031	NZ 1998-508326	19980612				
CA 2329774	AA 19991223		19990616				
AU 9946116	A1 20000105	AU 1999-46116	19990616				
AU 753567	B2 20021024						
BR 9911349	A 20010313	BR 1999-11349	19990616				
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R: AT, BE, CH,	DE, DK, ES, FR,	GB, GR, IT, LI, LU, NI	L, SE, MC, PT,				
IE, SI, FI,	RO						
TR 200003759	T2 20010621		19990616				
JP 2002518004	T2 20020625	JP 2000-554837	19990616				
RU 2234532	C2 20040820		19990616				
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US 6355457	B1 20020312	US 2000-567969	20000510				
US 6355458	B1 20020312	US 2000-568480	20000510				
US 6355459	B1 20020312	US 2000-568486	20000510				
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ZA 2000007145	A 20011022	ZA 2000-7145	20001204				
NO 2000006195	A 20010216	NO 2000-6195	20001206				
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US 6858404	B2 20050222	TD 2005 205000	20051020				
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PRIORITY APPLN. INFO.:		US 1998-155183P	P 19980618				
		US 1998-99504	A 19980618 P 19980924				
		US 1998-101631P	P 19980924 P 19990205				
		US 1999-118906P JP 2000-554837	A3 19990616				
		RU 2000-334837	A 19990616 A 19990616				
		WO 1999-EP4171	W 19990616				
		US 1999-EP4171	A3 19990617				
		US 2000-568472	A1 20000510				
AB Nucleic acid mols. are isolated from Sorangium cellulosum that encode							
AB NUCLEIC ACIA MOIS. Are isolated from solariginin cellulosum that encode							

Α polypeptides necessary for the biosynthesis of epothilone in Sorangium cellulosum strain 90 (DSM 6773). The gene cluster includes 22 open reading frames, several of which include domains for a given distinct activity of the epothilone synthase, including acyl carrier protein, $\beta\text{-ketosynthase}$, acyltransferase, $\beta\text{-ketoreductase}$, dehydratase, enoyl reductase, and thioesterase. Disclosed are methods for the production of epothilone in recombinant hosts transformed with the genes of the invention. In this manner, epothilone can be produced in quantities large enough to enable their purification and use in pharmaceutical formulations such as those for the treatment of cancer.

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L3		0 S	EPOTHILONE:	? (P)	POLYOXY	ETHYLENE	SORBITAN	?OLEATE		
L4		0 S	EPOTHILONE'	? (P)	POLYOXY	ETHYLENE	SORBITAN	(P) CYCI	LODEX	TRIN?
T.5		7 S	EPOTHTLONE:	2 (P)	CYCLODE	XTRIN?				